

ABSTRACT OF THE DISCLOSURE

Initial costs are suppressed by diverting an existing device, and a mountain road that is high in dangerousness of collision with another vehicle, or a narrow road on which visibility is low is discriminated in advance, to prevent the dangerousness of collision in advance. In order to achieve the above object, a present position calculating unit calculates a present position, an orientation and a velocity. In the case where a travel road determining unit determines that a road on which a subject vehicle is currently traveling is the mountain road or the narrow road on which visibility is low, the travel road determining unit transmits discrimination information for discriminating the subject vehicle and the present position information to an external server through a communication unit. A route guidance unit searches a crossable place and displays the crossable place on a display unit on the basis of proximity information on an oncoming vehicle which has been received from the server or a subsequent vehicle that gets abnormally closer to the subject vehicle. Two navigation devices may directly exchange the proximity information.

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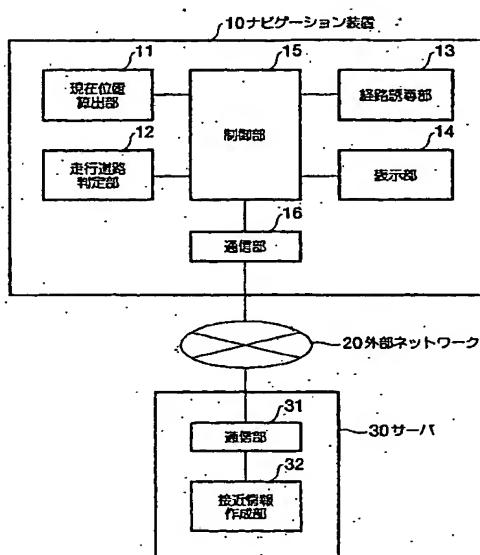
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(54) Title: NAVIGATION DEVICE AND APPROACH INFORMATION DISPLAY METHOD.

(54) 発明の名称: ナビゲーション装置および接近情報表示方法



- 10...NAVIGATION DEVICE
- 11...CURRENT POSITION CALCULATION SECTION
- 12...RUNNING ROAD JUDGMENT SECTION
- 15...CONTROL SECTION
- 16...COMMUNICATION SECTION
- 13...ROUTE GUIDING SECTION
- 14...DISPLAY SECTION
- 20...EXTERNAL NETWORK
- 30...SERVER
- 31...COMMUNICATION SECTION
- 32...APPROACH INFORMATION CREATION SECTION

(57) **Abstract:** By utilizing an existing device, the initial cost is reduced. A blind curve and a narrow road such as a mountain road having a high possibility of danger of collision are detected in advance and the danger of collision is evaded in advance. For this, a current position calculation section calculates the current position, the direction, and the speed. When a running road judgment section judges that the currently running road is a blind narrow curve such as a mountain road, it transmits identification information for identifying the local device and the current position information to an external server via communication means. According to the approach information on the oncoming car or the following car too near received from the server, a route guiding section searches a place where passing each other is possible and displays it on a display section. It should be noted that navigation devices can exchange information directly with each other.

(57) **要約:** 既存の装置を流用することで初期コストを抑え、他車両との衝突危険性が高い山岳路や見通しの悪い狭い道路を予め判別して、事前に衝突危険性を回避する。そのために、現在位置算出部が、現在位置、方位、速度を算出し、走行道路判定部が現在走行中の道路が山岳路や見通しの悪い狭い道路であると判定した場合には、自装置を識別するための識別情報および現在位置情報を通信手段を通じて外部のサーバへ送信し、サーバから受信した対向車両または後続異常接近車両についての接近情報を基に、経路誘導部が、それ違い可能場所を探索して表示部に表示する。なお、ナビゲーション装置どうしが直接接近情報を交換してもよい。